Description of Experimental Program

LoJack Corporation ("LoJack") requests authority herein to operate on the frequency 173.075 MHz at temporary fixed and mobile locations throughout the continental United States, to support the demonstration, installation and testing of its stolen vehicle recovery ("SVR") systems. As is explained in greater detail below, LoJack will use the equipment that is the subject of this application to (1) demonstrate the potential benefits of the LoJack system to state and local law enforcement agencies; and (2) assist it during the system design and testing phase of its SVR system installation program to ensure that there are no coverage gaps within a given service area.

As the Commission is aware, LoJack designs, develops and markets SVR systems, which are licensed to law enforcement agencies across the country. At present, sixteen states and the District of Columbia have established LoJack SVR systems, and the citizens of those states are enjoying fewer automotive thefts and lower insurance premiums as a result. To enable LoJack to demonstrate the benefits of its SVR system to other municipalities, the FCC has granted LoJack an experimental authorization that permits operation of a LoJack Micromaster mobile unit at any location within the continental United States (*see* FCC File No. 4864-EX-P/L-96, Call Sign KS2XBH).

Once the demonstration program has concluded, and the state or local police entity has contracted with LoJack for implementation of an SVR system, LoJack begins the system design and testing phase, during which it selects transmitter locations. Based on computer modeling, LoJack is able to predict the coverage area with a relatively high degree of accuracy. However, as accurate as the computer model is, LoJack still frequently encounters coverage problems that were not predicted by the model. Gaps in the coverage area, due to unmarked terrain features and man-made structures, are recurring problems. When such coverage gaps are discovered only after a transmitter site has been established, LoJack can incur significant costs to solve the problem, including, potentially, having to change the transmitter location.

To avoid these problems, LoJack operates a second component in the instant experimental license: a transmitting station, operating on 173.075 MHz, that will be operated at temporary fixed locations throughout the CONUS. LoJack uses the subject transmitter during the system design phase, to test the predicted coverage of the system. Through use of the transmitter, any gaps in the coverage area will be detected early in the system design process, when they can easily, and inexpensively, be remedied.

As is set forth in detail in the attached Form 442, LoJack is requesting authority to operate up to 11 transmitters -- one temporary-fixed and ten mobile -- on 173.075 MHz. The temporary-fixed transmitter will utilize a unity gain, omnidirectional antenna that will not exceed 6.1 meters (20 feet) above ground level or above an existing structure. The transmitter will operate at 50 Watts, which is one-half the power normally authorized by the Private Radio Bureau for the LoJack systems licensed to police entities. LoJack will use the device only between the hours of 8:00 am and 8:00 pm. The transmitter unit will be used only for two days per transmitter site, and will have a duty cycle of 100 ms/64 seconds. The transmitted signal will be a data packet with encoded site identification number.

The mobile transmitters also operate on 173.075 MHz and utilize subcarrier frequency shift keying. The mobile transmitter is installed within a motor vehicle and the antenna is, therefore, mounted less than 6.1 meters (20 feet) above ground level.

Accordingly, for the reasons set forth above, LoJack respectfully requests that the instant application be granted expeditiously.